## Memorandum

To: Members of the Multi-Modal Transportation Task Force

From: Alan Wickman

**Date:** May 18, 2004

Subject: On-Street Bike Lane Trial "Final Report"

In drafting this memo, I consulted several groups of experienced bicyclists and we are in unanimous agreement: there are serious problems with the "On-Street Bike Lane Trial" document proposed as a "final report" of the Multi-Modal Transportation Task Force (MMTTF).

The first 14 pages of the report represent an overview of publications describing bike lanes and their engineering. Things get complicated when dealing with real-life situations, especially when attempting to fit bike lanes onto existing streets that were not engineered with bike lanes in mind. Nevertheless, I have no problems with the first 14 pages, except with the reference to a "trial." I'll address that point later.

The primary problems with this report relate to the selection of suggested bike lanes. At the top of page 15, the statement is made that it is useful to ask four questions, the first of which is:

"What are the most critical segments of the existing *bike system* that can be complimented (sic) by a bike lane facility?" (emphasis added)

On page 16, the first sentence in the first full paragraph states:

"By looking at a map of the local roadway system that includes the locations of existing and planned bike trail locations and on-street bike routes, logical bike lane locations can be identified to fill in the gaps in *the system*." (emphasis added)

Then, on page 19, a map with suggested bike lane corridors is shown, and the paragraph preceding it contains the statement:

"Five potential bike lane corridors are suggested below as starting points for possible bike lane development, most likely as pilot studies and projects, in order to establish the first bike lane facilities that best compliment (sic) the existing *bicycle system*." (emphasis added)

One of the five "corridors" mentioned on page 19 is the entire downtown Lincoln area, which will be the subject of later study. The other suggested corridors are more specific:

- (1) South 14th Street from the Department of Roads north to the Capitol area.
- (2) "J" Street from Lincoln High School east to somewhere east of Cotner.

- (3) "G" Street from Lincoln High School west to 8th Street.
- (4) 40th Street between Holdrege and Vine Streets.

In my opinion, there is no need for bike lanes on any of these four streets. They are 25mph streets that don't carry an excessive traffic load. Not only would an experienced bicyclist feel no intimidation on these streets, it is hard to imagine that any adult bicyclist – regardless of their experience level – should feel intimidated riding on these streets. As such, there is no need to have bike lanes on these streets, because they already qualify as being "less stressful" places to ride.

The selection of these four routes as potential corridors for bicycle lanes reflects flawed logic, one that appears to view trails and signed on-street bike routes as being the *bicycle system*. That isn't the correct way to view a bicycle transportation network. Rather, the entire system of roads and trails should be viewed as the bicycle transportation network, with the exception of streets that even experienced cyclists usually choose to avoid. For instance, I won't ride on "O" Street from 27<sup>th</sup> to 84<sup>th</sup> Streets. I'll take another route, even though it may cause me to go a mile out of my way.

With regard to these four suggested bike lane routes, I requested comments via e-mail from members of the Great Plains Bicycling Club and I also posted material on a local bicycling discussion forum. With one minor exception, none of the responses that I received indicated any support for bike lanes on these four streets. The "minor exception" was that one bicyclist thought that "J" Street or portions thereof might be an appropriate candidate for bike lanes, because the traffic load on it during the morning and evening rush hours is fairly high for a residential street and the existence of parking often requires a bicyclist to ride in the traffic lane.

## BICYCLISTS' VIEWS ON BIKE LANES GENERALLY -

My comments regarding the input that I received on bike lanes would be incomplete without describing the opposition that has been expressed to me about bike lanes in general by a number of bicyclists that I contacted. I don't believe that such persons were in the majority, but they are still a significant minority with some strong feelings.

As a proponent, I view bike lanes as a way to fill in gaps in the bicycle transportation network (streets & trails) with alternatives that will allow more bicyclists to travel to their destinations without the necessity (either real or perceived) to make substantial detours in order to avoid streets that they feel are not safe. It isn't that I don't recognize the problems and potential problems associated with bike lanes; rather, I still think that a city can treat its bicyclists better if it judiciously uses well designed bike lanes for those arterial streets that are the only relatively direct way to get to various locations. (Note that some bike lane opponents favor wide curb lanes when an engineering response is needed. I don't want to dismiss wide curb lanes. They may sometimes be more desirable than painted bike lanes, depending on the situation being addressed.)

As I have already noted, not all experienced bicyclists share my views. In my opinion, some of the criticisms of bike lanes relate to poorly designed bike lanes, but most of the criticisms cannot be dismissed so easily. Regardless of where people eventually align themselves with regard to bike lanes, I believe that it is not possible to make reasoned judgments with regard to bike lanes without understanding both the generic criticisms of bike lanes, plus the criticisms that relate to bike lanes that have been poorly designed.

The criticisms are numerous. Bike lanes – especially those that are not well designed – can create awkward or hazardous situations for cyclists making left hand turns or that want to go straight when there are automobiles turning right. Bike lanes next to parked vehicles can be dangerous, especially for the bicyclist that tends to ride to the right hand side of the bike lane. Bike lanes don't stay as clean as the rest of the roadway because they don't benefit as much from the draft of cars passing over. There are also concerns that the presence of a smattering of bike lanes will cause motorists to feel that bicyclists don't belong on arterial streets unless the street has a bike lane. For a fuller exposition of these points of view, you could start by viewing the PowerPoint presentation at the website http://tomrevay.tripod.com/projects/MassBike/BikeLanes/index.htm (the "Bike Lane Contrarian") or by reading John Forrester's Effective Cycling. Finish up by using Google to surf the Internet for a dizzying array of points and counterpoints.

But regardless of whether you're talking to experienced bicyclists that are generally against bike lanes or to those who are proponents like me, you will find virtually uniform opposition among experienced bicyclists to bike lanes on 25mph residential streets. They just aren't necessary. Plus, as a "trial," they wouldn't give a good idea of either the utility or attractiveness of bicycle lanes.

## **DOWNTOWN BIKE LANES -**

This brings me to the subject of bike lanes downtown. While the MMTTF hasn't been asked to make decisions regarding downtown bike lanes, my response would be incomplete if I didn't touch on the subject. Some of the characteristics of downtown streets include:

- > Cars are frequently pulling in and out of parking spots. Parking-related hazards for bicyclists include car doors opening and cars backing out of diagonal parking spots.
- > On most streets for most of the day, there are moderate levels of traffic, although "O" Street, and 9th, 10th, 16th and 17th Streets tend to be relatively congested during morning and afternoon rush hours.
- Except for a few blocks on 9<sup>th</sup> and 10<sup>th</sup> Streets, these are 25mph streets, although 9<sup>th</sup>, 10<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup> Streets appear to involve somewhat higher average speeds as extensions of arterials.

The riding behaviors that I have observed in the downtown area include:

- Presumably because of the characteristics noted above, fewer bicyclists use "O" Street, and 9<sup>th</sup>, 10<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup> Streets than use the other streets in downtown Lincoln.
- ➤ Bicyclists regularly ride on the streets of downtown Lincoln and, as far as I can tell, most of those bicyclists don't feel intimidated or endangered. (I commute to my office in downtown Lincoln on most days and virtually never feel threatened. Rather, I most frequently encounter hazardous situations on the bike path paralleling Capitol Parkway at the two intersections where it crosses Randolph and "J" Streets.)
- > There are also many bicyclists that ride on sidewalks in downtown Lincoln, even though it is more likely to result in accidents and is against a city ordinance.

I don't want to draw any final conclusions about downtown bike lanes prior to hearing the opinions of others, but my current leaning is that I don't see the need for bike lanes downtown. These are

25mph streets, with motorists accustomed to routinely needing to slow down or change direction to accommodate pedestrians, bicycles, vehicles that are parking, leaving a parking spot, making turns, shifting lanes, and so forth. I see the advantages minus the disadvantages for downtown bike lanes as being significantly different than for bike lanes on a 35mph arterial with no parking and relatively limited turning situations. In my opinion, the need to prioritize education of bicyclists is underscored by current bicycling behaviors in downtown Lincoln (e.g., riding on the sidewalks).

If an engineering response is still desired to support bicyclists downtown, then I suspect that the best way to have a more bicycle-friendly north-south route would be to have a two-way street, with center left turn lanes at appropriate intersections, and with a single lane of traffic going in each direction. There would be no parking on the street on either side, and the traffic lanes would be extra wide (i.e., 15-16 feet), which would be conducive to allowing a bicycle and an automobile to share the street going in the same direction. In addition, the street should be maintained to a higher standard than other downtown streets, so that a bicyclist traveling 3 feet or so from the curb would not be forced to weave back and forth to dodge defects in the pavement.

I will admit that this would be a street that could easily have bike lanes painted on it, yet I think that we'd probably be better off not to do that. Rather, it could be designated as an "on-street bike route." (It is notable that it would be Lincoln's first on-street bike route that had been engineered for that purpose.) I believe that an analysis of the pro and con arguments with regard to bike lanes will show that adding bike lane stripes won't—especially in this situation—give much of an advantage to bicyclists, yet it will make turning conflicts more likely, especially when there are bicyclists (and motorists) that are less familiar with appropriate behaviors around bike lanes.

## CONCLUSION & RECOMMENDATIONS -

In my opinion, well-designed bike lanes on a number of arterial streets would be a useful addition for bicyclists in Lincoln. But I must stress that this is *my* opinion, and there are other bicyclists with lots of experience that have opposing opinions. At this point, however, I don't believe that it is necessary for the MMTTF to make detailed final decisions with regard to bike lanes. It won't need to settle the differences that I may have with bike lane opponents. But there are a few decisions that I recommend:

- (1) The specific suggestions for bike lanes should be deleted from the proposed final report. The one point of agreement among the bicyclists that I discussed this with was that these proposals were not good ideas. This can be accomplished by deleting pages 19 through 24. While this still leaves some references in other parts of the report that are less than absolutely perfect, these imperfections can be addressed through the discussions that will follow at later dates. After all, it is obvious that most of the work product, except for the last two pages, is simply a staff-produced overview of current publications. It won't be like anyone can strongly attribute this material to either the MMTTF or the Pedestrian-Bicycle Advisory Committee.
- (2) Again, the first priority should be for the city to add a bicycle / pedestrian (or "multi-modal") coordinator to its staff. At that point, the coordinator will need to establish means to communicate with the city's bicyclists, because the MMTTF will have gone away, and the Pedestrian-Bicycle Advisory Committee is not a complete response to this need for communication.

My last preference for changes to the "final report" would be for the references to "trial" to be deleted. This would involve some relatively minor edits. I don't mean to imply that a decision has been made to go full speed ahead with bike lanes, but nothing that I have seen suggested to date approaches a fair trial. In fact, a "fair trial" in Lincoln (e.g., the installation of bike lanes on 3 or 4 arterials) would require a major commitment of resources. I can't imagine that the City Council would allocate significant resources to a "trial" – I know that I wouldn't.

Lincoln needs to hire a bicycle-pedestrian coordinator who will interact with the bicycling community, the Pedestrian-Bicycle Advisory Committee and others in city government and the community to develop long-term overall goals regarding bike lanes, education, other bicycling facilities and other aspects of city support for bicycling. As I have already indicated, this will involve extensive discussions and debate regarding bike lanes. Everyone will learn from that.

Following these discussions and the establishment of detailed plans and goals, the City Council will then need to be approached with appropriation requests for proposals going a number of years into the future that incorporate recognition of bicycling needs. The City Council will look at the near-term proposals for which it is being asked to allocate money, and it will also look at these within the context of a long-term master plan. If the requests cost more money than they are worth, or if they don't make sense as part of a good long-term master plan, then the City Council should, at a minimum, send the planners back to the drawing boards. But shouldn't be a matter of just saying that we want to "try a couple of bike lanes," because that would encourage something on the cheap, and it is a lot easier to design cheap bike lane installations than it is to design good ones.